

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. Patent Application of)
AOKI)
Application Number: -To be Assigned)
Filed: Concurrently Herewith)
For: SEMICONDUCTOR LASER)

#50
D. Scott
68-82

Honorable Assistant Commissioner
for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Applicant has amended the claims in order to make them correct in accordance with standard U.S. practice. Prior to an examination on the merits, please amend the above-identified application as follows:

IN THE CLAIMS:

Please substitute the claims with the following amended claims:

10. (Amended) An optical module comprising at least an optical fiber for introducing light outside and a semiconductor laser that includes a semiconductor substrate, a core region formed on one side of the semiconductor substrate, and a clad region formed on the opposite side of the substrate not having the core region, wherein

the core region has a gain area length not smaller than 18 micrometers and not greater than 200 micrometers, at least one of the core region and the clad region has a stripe shape, and a stripe width is modulated in the vertical direction against the optical axis of at least the core region or the clad region and in the parallel direction with respect to the substrate surface,

the stripe width in the vicinity of the stripe ends is set narrower than a cut-off width where a lateral mode is identical, and